

Title (en)

PROPELLER SYSTEM FOR AN ELECTRICALLY DRIVEN AIRCRAFT, AIRCRAFT COMPRISING A PROPELLER SYSTEM AND METHOD OF SELECTIVELY ADAPTING AN ENERGY SUPPLY WITHIN A PROPELLER SYSTEM OF AN ELECTRICALLY DRIVEN AIRCRAFT

Title (de)

ANTRIEBSSYSTEM FÜR EIN ELEKTRISCH ANGETRIEBENES FLUGZEUG, FLUGZEUG MIT ANTRIEBSSYSTEM UND VERFAHREN ZUR SELEKTIVEN ANPASSUNG EINER ENERGIEVERSORGUNG IN EINEM ANTRIEBSSYSTEM EINES ELEKTRISCH ANGETRIEBENEN FLUGZEUGS

Title (fr)

SYSTÈME DE PROPULSION POUR UN AÉRONEF À PROPULSION ÉLECTRIQUE, AÉRONEF COMPRENNANT UN SYSTÈME DE PROPULSION ET PROCÉDÉ D'ADAPTATION SÉLECTIVE D'UNE ALIMENTATION D'ÉNERGIE À UN SYSTÈME DE PROPULSION D'UN AÉRONEF À PROPULSION ÉLECTRIQUE

Publication

EP 3825229 A1 20210526 (EN)

Application

EP 19380031 A 20191119

Priority

EP 19380031 A 20191119

Abstract (en)

The invention relates to a propulsion system (10) for an electrically driven aircraft (100). The propulsion system comprises a plurality of drive units (30a, 30b, 30c) and an energy management subsystem (11) for adapting an energy supply to the plurality of drive units (30a, 30b, 30c). The energy management subsystem (11) comprises a control unit (22), an energy storage unit (24) and a voltage converter (26). The voltage converter (26) is configured to adapt an output voltage of the energy storage unit (24) to a voltage level of a selected one of the plurality of drive units (30a, 30b, 30c) and the control unit (22) is configured to connect the energy storage unit (24) to the selected one of the plurality of drive units (30a, 30b, 30c), such that energy is supplied by the energy storage unit (24) to the selected one of the plurality of drive units (30a, 30b, 30c) or such that energy is withdrawn from the selected one of the plurality of drive units (30a, 30b, 30c). The invention also relates to an aircraft (100) comprising the propulsion system (10) and to a method of selectively adapting an energy supply within a propulsion system (10) of an electrically driven aircraft (100).

IPC 8 full level

B64C 27/08 (2006.01); **B64C 27/20** (2006.01); **B64C 39/00** (2006.01); **B64D 27/24** (2006.01); **B64D 31/06** (2006.01); **B64D 31/10** (2006.01);
B64D 31/14 (2006.01); **B64D 35/00** (2006.01); **B64D 35/04** (2006.01)

CPC (source: EP)

B64D 27/24 (2013.01); **B64D 31/10** (2013.01); **B64D 35/04** (2013.01); **B64D 2221/00** (2013.01); **Y02T 50/40** (2013.01); **Y02T 50/60** (2013.01)

Citation (applicant)

- EP 2720945 A1 20140423 - EADS DEUTSCHLAND GMBH [DE]
- US 2016137305 A1 20160519 - JOUBERT EMMANUEL [FR], et al

Citation (search report)

- [X] EP 3103670 A1 20161214 - ROLLS ROYCE CORP [US], et al
- [X] EP 3296212 A1 20180321 - ROLLS ROYCE PLC [GB]

Cited by

SE2250982A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3825229 A1 20210526

DOCDB simple family (application)

EP 19380031 A 20191119